

# Notice of Allowability

Application No.

09/832,171

Examiner

Callie E. Shosho

Applicant(s)

OTA ET AL.

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 10/12/04 and interview summary conducted 12/6/04.
2. ☒ The allowed claim(s) is/are 1,2,5-14,16-27 and 30-66.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 12/6/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- (1) Claim 6, line 4, delete "[ka-1]".
- (2) Claim 6, line before formula (II), delete "[ka-2]".
- (3) Claim 10, line 9, delete "[ka-3]".
- (4) Claim 37, line 10, after "is" and before "selected", insert "one or more materials".
- (5) Claim 37, line 25, delete "[ka-3]".
- (6) Claim 40, line 4, delete "[ka-1]".
- (7) Claim 40, line before formula (II), delete "[ka-2]".
- (8) Claim 61, line 4, after "weight; and before "of" insert "that is less than an amount by weight".
- (9) Claim 61, line 5, after "solvent" and before "surfactant, insert ",".

2. Authorization for this examiner's amendment was given in a telephone interview with Clifford Mass on 12/6/04.

**Statement of Reasons for Allowance**

3. The present claims are allowable over the "closest" prior art EP 851005 for the following reasons:

EP 851005 discloses process for preparing pigment dispersion which comprises (a) pigment surface treatment step of introducing hydrophilic group such as sulfonic group directly onto surface of the pigment in an amount of  $10 \times 10^{-6}$  equivalents or larger per g of pigment wherein the pigment includes CI Pigment Blue, Red, and Yellow, quinacridone pigments and phthalocyanine pigments, (b) dispersion step of dispersing surface treated pigment in admixture with wetting agent such as ethylene glycol and water, and (c) adding resin such as alkali-soluble resin for providing dispersability during the dispersion step to form pigment dispersion wherein the pigment dispersion comprises polyvalent metal ion such as calcium, magnesium, iron, and nickel in amount of up to 80 times the neutralization equivalent of the sulfonic acid groups contained per g of dispersion. The resulting pigment dispersion is used in ink jet inks.

However, there is no disclosure or suggestion of wetting agent selected from the group consisting of glycol ethers, 1,2-(C<sub>4</sub>-C<sub>10</sub> alkyl) diols, 1, 3-(C<sub>4</sub>-C<sub>10</sub> alkyl) diols, 1,5-(C<sub>4</sub>-C<sub>10</sub> alkyl) diols, and 1,6-(C<sub>4</sub>-C<sub>10</sub> alkyl) diols as now required in present claim 1. Further, there is no disclosure or suggestion that the resin is a vinyl polymer obtained by the copolymerization of (a) one or more selected from the group consisting of silicon macromer and (meth)acrylamide, (b) polymerizable unsaturated monomer having salt producing group, and (c) monomer copolymerizable with monomers (a) and (b) as required in present claim 37. Additionally, while EP 851005 discloses ink jet ink comprising the above pigment dispersion, there is no disclosure or suggestion in EP 851005 of ink jet ink having solid component comprising the surface treated

pigment and resin and liquid component comprising the wetting agent, solvent, surfactant, polyvalent metal ions, and water wherein the solid component is present in amount by weight that is less than amount by weight of the wetting agent, solvent, surfactant, and polyvalent metal ions present in the liquid component of the ink as required in present claim 66.

Thus, it is clear that EP 851005 does not disclose or suggest the present invention.

Further, applicants' amendment filed 10/12/04 overcomes the claim objection and 35 USC 112, second paragraph rejection of record.

In light of the above, it is clear that the rejections of record are untenable and so, the present claims are passed to issue.

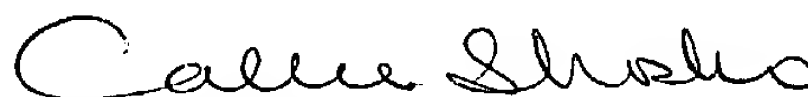
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
12/6/04